



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,046

01/19/2005

Hiroataka Koyo

10873.1600USWO

4009

23552 7590 09/24/2007

MERCHANT & GOULD PC

P.O. BOX 2903

MINNEAPOLIS, MN 55402-0903

EXAMINER

BOLDEN, ELIZABETH A

ART UNIT

PAPER NUMBER

1755

MAIL DATE

DELIVERY MODE

09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/522,046

Applicant(s)

KOYO ET AL.

Examiner

Elizabeth A. Bolden

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/25/05</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1755

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDS submitted 25 March 2005 has been considered by the Examiner.

Drawings

The original drawings received on 19 January 2005 are accepted by the Examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the phrase "to processing of a vicinity of a surface thereof and processing of making a through hole" renders the claim indefinite because it is unclear what the claim is trying to limit. The language of the claim is unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1755

Claims 1-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Koyo et al., U.S. Patent Application Publication 2003/0100431.

Koyo et al. disclose a glass substrate for laser processing. See Abstract and paragraphs [0001]-[0016]. Koyo et al. disclose a glass composition having overlapping ranges of components with instant claims 1-4. See Abstract and paragraph [0016]. The compositional ranges of Koyo et al. are sufficiently specific to anticipate the glass as recited in claims 1-4. See MPEP 2131.03. Koyo et al. disclose that the glass contain titanium as recited in instant claim 4. See paragraph [0042]. Koyo et al. disclose a processing threshold as recited in instant claim 6. See paragraphs [0033]-[0034]

As to claims 7-10, these claims recite process limitations in a product claim. Product claims including process recitations are not limited by the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present instance, the process steps imply that the glass is in the form of a plate. The reference discloses such a product. See paragraph [0023].

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Koyo et al. would inherently possess the same thermal expansion coefficient as recited in claims 5 and 6. See MPEP 2112.

Claims 1, 2, and 4-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Krashkevich et al., U.S. Patent 5,039,631.

Krashkevich et al. disclose a glass substrate. See Abstract and column 1, line 10-20. Krashkevich et al. disclose a glass composition having overlapping ranges of components with instant claims 1, 2, and 4. See Abstract and column 1, line 60 to column 2, line 25. The compositional ranges of Krashkevich et al. are sufficiently specific to anticipate the glass as recited in claims 1-4. See MPEP 2131.03. Krashkevich et al. disclose that the glass contain titanium as recited in instant claim 4. See column 2, lines 14 and 27-37. Krashkevich et al. disclose thermal expansion coefficient range as recited in instant claims 5 and 6. See Table 5 range of the CTE of the examples: $78.9 - 94.1 \times 10^{-7}/^{\circ}\text{C}$.

As to claims 7-10, these claims recite process limitations in a product claim. Product claims including process recitations are not limited by the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present instance, the process steps imply that the glass is in the form of a plate. The reference discloses such a product. See column 5, lines 47-54 and column 6, lines 17-33.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Krashkevich et al. would inherently possess the same processing as recited in claim 6. See MPEP 2112.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mader et al., U.S. Patent 5,039,631.

Mader et al. disclose a glass substrate. See Abstract. Mader et al. disclose a glass composition having overlapping ranges of components with instant claims 1-4. See Abstract and column 2, line 35-47. The compositional ranges of Mader et al. are sufficiently specific to anticipate the glass as recited in claims 1-4. See MPEP 2131.03. Moreover, Mader et al. disclose Examples 11 and 14-16, which anticipate instant claims 1, 2, 4-10. See Tables 4 and 6. Mader et al. disclose that the glass contain titanium as recited in instant claim 4. See Abstract and column 2, line 47. Mader et al. disclose thermal expansion coefficient range as recited in instant claims 5 and 6. See Abstract and column 4, lines 28-34.

As to claims 7-10, these claims recite process limitations in a product claim. Product claims including process recitations are not limited by the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present instance, the process steps imply that the glass is in the form of a plate. The reference discloses such a product. See column 4, lines 43-51 and column 6, lines 17-33.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Mader et al. would inherently possess the same processing as recited in claim 6. See MPEP 2112.

Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al., U.S. Patent 4,567,104.

Art Unit: 1755

Wu et al. disclose a glass substrate. See Abstract. Wu et al. disclose a glass composition having overlapping ranges of components with instant claims 1-4. See Abstract and column 7, lines 23-47. The compositional ranges of Wu et al. are sufficiently specific to anticipate the glass as recited in claims 1-4. See MPEP 2131.03. Moreover, Wu et al. disclose Examples 7 and 8, which anticipate instant claims 1-10. See Table I. Wu et al. disclose that the glass contain titanium as recited in instant claim 4. See Abstract and column 7, lines 23-47.

As to claims 7-10, these claims recite process limitations in a product claim. Product claims including process recitations are not limited by the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113. In the present instance, the process steps imply that the glass is in the form of a plate. The reference discloses such a product. See column 11, lines 17-45.

Since the composition of the reference is the same as those claimed herein it follows that the glasses of Wu et al. would inherently possess the same thermal expansion coefficient and processing as recited in claims 5 and 6. See MPEP 2112.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Art Unit: 1755

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3, 4, and 16 of copending Application No. 10/262,864. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositional ranges overlap. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 10/541,175. Although the conflicting claims are not identical, they are not patentably distinct from each other because the compositional ranges overlap. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-10 are directed to an invention not patentably distinct from claims 3, 4, and 16 of commonly assigned 10/262,864. Specifically, the compositional ranges overlap. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Claims 1-10 are directed to an invention not patentably distinct from claims 1-8 of commonly assigned 10/541,175. Specifically, the compositional ranges overlap. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/262,864 and 10/541,175, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as

Art Unit: 1755

prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Conclusion

The additional references cited on the 892 have been cited as art of interest since they are considered to be cumulative to or less than the art relied upon in the rejections above.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 10 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EAB

9 September 2007


J.A. LORENGO
SUPERVISORY PATENT EXAMINER